

WHAT IS CLAIMED IS:

1. A granular detergent composition having an average bulk density of at least about 400 g/L and characterized by a rate of dispersion as defined by the equation:

$$R = R^* + (1 - R^*) \exp \left(- \left(\frac{t}{DT(t_{wash})} \right)^m \right)$$

where R is the residual undissolved detergent at any point in time, t, R^* is the long term residual undispersed detergent having a value of less than about 14% of the total amount of an initial dosage of detergent, t is any single point in time, m is a stretching exponent having a value of less than about 2, DT is dispersion time having a value of less than about 0.5 and t_{wash} is the time of the wash cycle.

2. The granular detergent composition as claimed in Claim 1 wherein at least 90% of the insoluble residues of the granular detergent composition have an average particle size of less than about 10 μm .

3. The granular detergent composition as claimed in Claim 1 wherein R^* has a value of less than about 7%, m has a value of less than about 1.5 and DT has a value of less than about 0.25.

4. The granular detergent composition as claimed in Claim 3 wherein R^* has a value of less than about 3.5%, m has a value of less than about 1 and DT has a value of less than about 0.12.

5. The granular detergent composition as claimed in Claim 1 wherein said detergent composition has a rate of dissolution as defined by the equation:

$$U = U^* + (1 - U^*) \exp \left(- \left(\frac{t}{RT(t_{wash})} \right)^n \right)$$

where U is the fraction of undissolved surfactant at any point in time, t, U^* is the long term surfactant residual undissolved surfactant having a value of less than about 14% of the total amount of an initial dosage of surfactant, t is any single point in time, n is a stretching exponent having a value of less than about 2, RT is dissolution time having a value of less than about 0.5 and t_{wash} is the time of the wash cycle.

SEARCHED
INDEXED
MAILED
SERIALIZED
FILED

Sub
C1

6. The granular detergent composition as claimed in Claim 4 wherein U* has a value of less than about 7%, n has a value of less than about 1.5 and RT has a value of less than about 0.25.

*Sub
C* 7. The granular detergent composition as claimed in Claim 5 wherein U* has a value of less than about 3.5%, n has a value of less than about 1 and RT has a value of less than about 0.12.

*Sub
C* 8. The composition as claimed in any of claims 1-7 wherein said composition has insoluble residues and at least about 90% of said insoluble residues have a particle size of less than 15 μm .